

***Executive Summary of the Four-year-old Child Development
Program Evaluation for***

The South Carolina Education Oversight Committee

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On behalf of the South Carolina Education Oversight Committee (EOC), Dr. Jo Anne Anderson, Executive Director of the EOC, commissioned Drs. William H. Brown and Ellen Potter with support from personnel in the Office of Program Evaluation, Department of Educational Psychology, College of Education, at the University of South Carolina to perform a two-year, descriptive evaluation for the purpose of collecting initial information about how state-funded, four-year-old child development programs are being implemented for over 15,000 preschoolers and their families across South Carolina (i.e., about 28% of the four-year-old population). This brief report is an executive summary of the findings from the two-year evaluation. During the course of the two-year project, three basic descriptive evaluation methods were employed: (a) state-wide teacher and coordinator surveys; (b) direct observation of a sample of 15, four-year-old child development classrooms with both the *Early Childhood Environmental Rating Scale-Revised* (1998) and the *Teacher Styles Rating Scales* (1998); and (c) telephone interviews of the teacher and the early childhood coordinator for each participating classroom in the sample of 15 preschools. For more detailed information on the evaluation, the reader is referred to the first-year and second-year reports and accompanying power point presentations that are accessible through the South Carolina Education Oversight Committee (EOC) web site www.state.sc.us/eoc/ (i.e., *Teacher Survey Report – Four-Year-Old Child Development Programs*, *Coordinator Survey Report – Four-Year-Old Child Development Programs*, and *Second Year Report of the Evaluation of the Four-Year-Old Child Development Programs Funded through the South Carolina Education Improvement Act*).

During the first year of the project, the evaluation included statewide surveys of teachers and early childhood coordinators in state-funded, four-year-old child development programs. Drs. Brown and Potter and personnel from the Office of Program Evaluation developed the teacher and coordinator surveys during the fall of 2001. In the winter of 2002, the two surveys

were field tested with childhood development teachers and early childhood coordinators in two school districts in South Carolina. The teacher survey consisted of a combination of 31 forced-response, Likert-type, and open-ended response items and was divided into nine topic areas (i.e., demographic and classroom information, funding issues, school facilities, teacher opportunities for professional development, parental involvement, child and program evaluation, public awareness and community involvement, curriculum, and dual enrollment of preschoolers). Similarly, the coordinator survey consisted of a combination of 42 forced-response, Likert-type, and open-ended response items and was divided into eight topic areas (i.e., demographic information; screening and enrollment processes; funding and sources of funds; school facilities, physical environment, and transportation; opportunities for professional growth; parental involvement; child and program evaluation; and public awareness and community involvement). The response rates for the two surveys were excellent with an 87% return rate for teachers and an 86% return rate for early childhood coordinators. Hence, the high response rates indicate that the problem of nonresponse bias should not affect the interpretation of the survey results as they apply to the child development teachers and early childhood coordinators in the state-funded, four-year-old child development programs. For more detailed information beyond what is described in the remainder of the Executive Summary, which includes individual item response information and tables, the reader is referred to the first-year survey reports (i.e., *Teacher Survey Report – Four-Year-Old Child Development Programs* and *Coordinator Survey Report – Four-Year-Old Child Development Programs*).

During the second year of the project, the evaluation included direct observation of a sample of 15, four-year-old child development classrooms with both the *Early Childhood Environmental Rating Scale – Revised* and the *Teacher Styles Rating Scales* and telephone interviews of the teacher and coordinator for each classroom in the 15 participating preschools. The purpose of the direct observations and follow-up interviews was to obtain additional information from a sample of preschools, which was stratified across both district program size (i.e., small, medium, and large) and region of the state (i.e., coastal, midlands, upstate), of how state-funded, four-year-old child development program services have been implemented across South Carolina. During the fall and winter of 2002-2003, extensive training of observers with the *Early Childhood Environmental Rating Scale – Revised* and the *Teacher Styles Rating Scales* was conducted in local preschools not observed in the 15-classroom sample. During the spring of

2003, three well-trained graduate assistant observers. site-visited the preschools in the 15 designated school districts; in 3 of these preschools they served as the primary observer along with Dr. Brown for inter-rater agreement assessment. In the spring of 2003, the telephone interview for teachers and coordinators was developed based on information gleaned from the first-year surveys. Following the preschool site-visits, interviewers contacted and conducted a telephone interview with the teachers in participating classrooms and the early childhood coordinators from their respective school districts. For more detailed information on observer training, inter-observer agreement procedures and results, and interview procedures and results the reader is referred to the second-year report (i.e., *Second Year Report of the Evaluation of the Four-Year-Old Child Development Programs Funded through the South Carolina Education Improvement Act*).

Findings from the Teacher Survey

Demographic information for four-year-old child development teachers. Information from the teacher survey indicated that the child development teachers (hereafter called teachers) are mostly female (99%) and that they were an experienced and well-educated group of early childhood professionals. Specifically, teachers average number of years of teaching experience was about 13 years and about 52% had bachelor's degrees with the remaining having graduate degrees with 31% master's degrees, 17% master's degrees plus 30 additional hours, and about 1% education specialist's or doctoral degrees. In addition, 95% of the teachers reported that they had teacher certification in early childhood education (i.e., slightly less than 91% with early childhood certification and slightly less than 5% with add on early childhood certification).

Additional information from teachers reported on first-year surveys. Responses from the teacher survey included information on several important dimensions and are delineated in the remainder of this subsection. First, four-year-old child development classrooms served on average about 20 preschoolers per class depending on the form of service delivery (i.e., Mean = 18 children in morning classes, Mean = 17 in afternoon classes, Mean = 19 in full-day classes, and Median = 20 children for morning, afternoon, and full-day classes). Second, 70% of teachers reported that they were satisfied with the adequacy of preschool funding to promote school readiness for kindergarten. Third, 86% of teachers were satisfied with the personnel available in preschool classes; however, 53% of them reported that they had inadequate classroom and outdoor facilities to meet the basic needs of preschoolers. Fourth, the highest teacher interest in

continuing professional development, which included inservice and technical assistance, was in the areas of: (a) teaching literacy and numeracy skills to preschoolers; (b) working with families of young children; (c) implementing Developmentally Appropriate Practices (DAP) with preschoolers; (d) employing positive child guidance strategies with young children; and (e) assessing preschool children's learning and development. Fifth, the vast majority of teachers reported having parent conferences (92% with a Median of 2 parent conferences per child annually) and making home visits (88% with a Median of 2 home visits per child annually). Sixth, teachers also indicated some type of frequent parent involvement with their classroom with the majority of the involvement including some parental assistance on field trips (90%) and special school events (84%). In addition, 68% of the teachers reported that at least some parents were involved in parent education activities. Seventh, teacher procedures for assessing child progress included: (a) teacher made assessments (73%); (b) school readiness measures (69%); (c) formal teacher observations (62%); (d) portfolio assessments (60%); (e) narrative and anecdotal recordings (55%); (f) work sampling system (45%); (g) literacy/numeracy measures (33%); and (h) social competence measures (31%). Eighth, teachers reported using the following curricula: (a) High Scope Curriculum (43%); (b) combination of curricula, mostly with High Scope Curriculum (38%); (c) Creative Curriculum (4%); (d) Montessori Curriculum (3%); and (e) Project Approach (< 1%). Finally, teachers reported that a number of preschoolers were dually enrolled in other community-based programs.

Findings from the Early Childhood Coordinator Survey

Demographic information for early childhood coordinators. Information from the coordinator survey indicated that the early childhood coordinators are mostly female (87%) and that they were an experienced and well-educated group of professionals. Specifically, coordinators' average number of years of administrative experience was approximately 13 years and all had graduate degrees, with about 21% with master's degrees, about 54% with master's degrees plus 30 additional hours, 15% education specialists degrees, and 11% doctoral degrees. In addition, about 45% of the coordinators reported that they had certification in early childhood education.

Additional information from early childhood coordinators reported on first-year surveys. Responses from the early childhood survey included information on several important dimensions and are delineated in the remainder of this subsection. First, coordinators reported

that several criteria were used for enrollment in the child development programs including: (a) children's ages (98%); (b) developmental screenings (96%); (c) parental education level (58%); and (d) family income (46%). Nevertheless, it remains unclear how the pre-enrollment information was used to determine who was enrolled in particular programs. Second, coordinators indicated that they provided or secured the following social and medical services for young children: (a) health screenings, referral, and services (50%); (b) social services and referrals for social services (25%); (c) dental screenings, referrals, and services (19%); (d) psychological and school counselor services (18%); (e) parent education and support services (13%); (f) vision services (12%); and (g) hearing screenings and referrals (10%). On the other hand, 25% of the coordinators reported that they did not provide or secure social and medical services. Third, only 46% of the coordinators reported that they were satisfied with the adequacy of preschool funding to promote school readiness for kindergarten. Fourth, coordinators indicated their programs often used multiple funding sources to provide four-year-old child development services including: (a) South Carolina Educational Improvement Act (EIA) monies (92%); (b) South Carolina First Step funds (65%); (c) local school district monies (53%); and (d) U. S. Department of Education Title I funds (27%). Finally, a majority of coordinators reported waiting lists for four-year-old child development services and they indicated the following reasons for those waiting lists: (a) lack of personnel (53%); (b) lack of classroom space (45%); and (c) parental needs for full-day programs (32%). The reader is referred to the first-year reports for more detailed information on the two surveys.

Findings from the Site-visits to Four-Year-Old Child Development Classrooms

Two preschool rating scales, *Early Childhood Environmental Rating Scale – Revised (ECERS-R)* and the *Teacher Styles Rating Scales (TSRS)* were used to collect observational information from the participating preschools in 15 school districts that were stratified by size of the preschool program and region of the state. Extensive observer training was performed in the fall and winter of 2002-2003 and follow-up inter-rater agreement assessments were conducted on 3 of the 15 preschool programs while the programs were being observed. Inter-rater agreement measures indicated high levels of observer agreement for the two rating scales. Follow-up statistical analyses with information from the two rating scales indicated that the resultant scores were not systematically different based on either the size of the four-year-old child development

program (i.e., large, medium, and small) or the region of the state (i.e., coastal, midlands, upstate).

***ECERS-R* information and results.** The *ECERS-R* is a preschool rating scale that can be used by trained observers to examine the quality of preschool programs (e.g., arrangement and organization of classrooms, types and appropriateness of learning activities provided). The *ECERS-R* protocol consists of 43 items within 7 subscales: (a) Space and Furnishings; (b) Personal Care; (c) Language-Reasoning; (d) Activities; (e) Interaction; (f) Program Structure; and (g) Parents and Staff. The 43 items and 7 subscales yield a total composite score that is an excellent overall indicator of the quality of a preschool program. The *ECERS-R* scale is a seven-point, likert-type scale that ranges from 1 to 7 with 1 = Inadequate, 3 = Minimal, 5 = Good, and 7 = Excellent. In general, users of the *ECERS-R* consider preschool services rated at 3 or below to be considered of "low quality," those services that are rated between 3 and less than 5 to be of "medium quality," and those services that are rated 5 and above and up to 7 to be of "high quality" or "developmentally appropriate." The *ECERS-R* is a psychometrically sound preschool protocol for assessing the developmental appropriateness of preschool environments and has been used in many large-scale national studies of childcare and preschool programs.

Overall the *ECERS-R* ratings obtained during field-based observations indicated that 14 of the 15 preschools sampled scored in the high quality and developmentally appropriate range of preschool educational services. Moreover, the other preschool program was very close to a high quality rating with a total scale score of 4.93. As a general guide, it might be helpful to note that in a recent, large scale national study of child care programs that the average *ECERS-R* total score was 4.26 with 11% of the programs having a low quality rating (i.e., < 3), 65% of the programs having a medium quality rating (i.e., 3 up to < 5), and 24% the programs having a high quality rating (i.e., 5 and above up to 7). Across all 15 preschool programs, relative strengths were shown in the dimensions of Personal Care, Language-Reasoning, Interaction, Program Structure, and Parents and Staff. On the other hand, relative weaknesses were indicated in the dimensions of Space and Furnishings and Activities. In the specific case of Space and Furnishings, teachers reported that they were not satisfied with their school facilities, particularly their playgrounds, and that they wanted to spend improvement monies on up-grading facilities. For the Activities subscale scores, the lower scores obtained were most often a result of preschool programs failing to meet the *ECERS-R* standard of making a variety of preschool

learning activities and centers available for "a substantial portion of the day" (i.e., one third of the preschool day). Both half-day and full-day programs sampled had this problem with the "substantial portion of the day" requirement and many teachers readily acknowledged that it was difficult to accomplish the standard with the many other requirements of their schedules. For more detailed information on preschool site selection, observer training, and *ECERS-R* and *TSRS* results (e.g., ranges, means, and medians for subscales), the reader is referred to the second-year report (i.e., *Second Year Report of the Evaluation of the Four-Year-Old Child Development Programs Funded through the South Carolina Education Improvement Act*).

TSRS information and results. The *TSRS* is a preschool rating scale that can be used by trained observers to examine the instructional and affective characteristics of early childhood teachers. The *TSRS* consists of 20 items for two subscales, Teaching Behaviors and Affect. The Teaching Behavior dimension with a 1 to 7 likert-type rating scale allows raters to assess 7 teaching behaviors including: (a) redirects; (b) introduces; (c) elaborates; (d) follows; (e) informs; (f) acknowledges; and (g) praises. The *TSRS* Teaching Behavior subscale is a seven-point, likert-type subscale that ranges from 1 to 7 with 1 = Never, 3 = Occasionally, 5 = Often, and 7 Most of the Time. In addition, the Affect subscale with a 1 to 5 likert-type rating scale allows raters to evaluate 13 affective attributes of teachers including: (a) activity level; (b) positive expression; (c) negative expression; (d) visual involvement; (e) physical involvement; (f) emotional responsiveness; (g) consistency of interactions; (h) responsiveness to child interests, (i) child-directedness; (j) tone; (k) inclusion in activities; (l) teaching specific skills; and (m) developmental appropriateness. The *TSRS* Affect subscale is a five-point, likert-type scale that ranges from 1 to 5 with 1 = Never, 2 = Occasionally, 4 = Often, and 5 = Most of the Time. The items within the Teaching Behavior and Affect subscales are averaged to yield two separate subscale scores, one for the Teaching Behavior subscale and one for the Affect subscale. It should be noted that the *TSRS* is a much newer instrument than the *ECERS-R* and consequently has been used less often in research and evaluation projects. Nevertheless, the scale has demonstrated reasonable psychometric properties and because of its focus on the teachers' behavior was chosen to supplement the *ECERS-R* information.

The ratings on the *TSRS* subscales indicated that during an intensive, 15-minute observation focused on teachers during center time activities that teachers rated in the medium range for the 7 instructional behaviors whereas they rated in the high range for the 13 teacher

affective characteristics. Hence, although the teachers' affective characteristics were rated in the very high range, their actual exhibition of 7 instructional behaviors, at least during this observation during center time activities, was relatively lower and in the medium range. Taken together these findings may indicate that teachers established a high-quality atmosphere for children's activities (i.e., Affect subscale) but were less likely to frequently employ the 7 instructional behaviors related to teacher behavior (i.e., Teaching Behavior subscale). In addition, it should be noted that on the 2002 Teacher Survey that teachers frequently ask for professional development in the areas of teaching literacy and numeracy skills to young children, employing positive child guidance strategies with preschoolers, and implementing DAP with young children. These findings across both years of the project may suggest that teachers are comfortable in establishing developmentally appropriate classrooms but still desire assistance in embedding effective teaching strategies with young children during child-initiated, center-time activities.

Findings from the Interviews with Teachers and Early Childhood Coordinators in Four-Year-Old Child Development Programs

Interviews were conducted with the teachers of the 15 selected preschool classrooms that had been observed with the *ECERS-R* and the *TSRS* and the coordinators of their respective programs. Dr. Potter and Dr. Brown developed the teacher and early childhood coordinator interviews in the fall and winter of 2002. During the spring of 2003, the two interview protocols were pilot-tested with a child development teacher and the early childhood coordinator in Richland School District Two. Before the telephone interview, each participating teacher and early childhood coordinator was called to arrange an appointment for the 30-minute interview. An e-mail or fax confirming the interview date and time, giving contact information, and listing the specific questions to be asked was then sent them. Interviewees were assured that information allowing their responses to be identified will not be reported. All interviewees agreed to be tape-recorded. The audiotapes were then transcribed, and the responses were segmented by question using EXCEL and coded using NVivo qualitative software. All of the 15 teachers and early childhood coordinators were interviewed during the spring and summer of 2003. Because the interviews were designed as a follow-up to the Teacher and Coordinator Surveys from 2002, the interview protocol was constructed after the surveys were analyzed and presented to the Education Oversight Committee (EOC). Questions were constructed that would

address issues in which Committee members and staff expressed interest. The interviews for the Coordinators and Teachers covered the following areas: (a) basic information; (b) overall goals and program; (c) recruitment; (d) curriculum; (e) assessment; (f) parent programs; and (g) coordination with other programs.

Interview information and results. Interviewers asked a series of questions related to various dimensions of the four-year-old child development programs. Responses from teachers and early childhood coordinators included information on several important dimensions of preschool programs and are delineated in the remainder of this subsection. First, teachers and coordinators indicated that their primary program goal was enhancing preschoolers' school readiness. Second, although teachers and coordinators reported that most of the young children served were at high risk for school failure, they also indicated that a number of the preschoolers enrolled were not at high risk for school readiness difficulties. Third, most teachers and coordinators noted that they used a curriculum approved by the South Carolina Department of Education but only a few reported that they evaluated curriculum implementation. Fourth, teachers and coordinators indicated that they assessed preschoolers' skills and employed the information to plan instruction, inform parents of children's skill levels, and evaluate their programs. Nevertheless, the quality of assessment procedures remains unclear, particularly how assessment relates to individual instruction and program evaluation. Fifth, teachers and coordinators reported the availability and general effectiveness of parenting and family literacy programs but they also noted that those programs varied with respect to effectiveness depending upon who implemented the programs and the strategies they employed to work with parents and families. Finally, coordinators indicated that they collaborated extensively with community-based agencies to secure additional services for the preschool children enrolled and their families. For more detailed information on the teacher and early childhood coordinator interviews (e.g., questions asked, summaries of responses), the reader is referred to the second-year report (i.e., *Second Year Report of the Evaluation of the Four-Year-Old Child Development Programs Funded through the South Carolina Education Improvement Act*).

Critical Issues and Recommendations

Based on two years of descriptive evaluation, we believe that in general the state-funded, four-year-old child development programs in South Carolina provide high quality early childhood education services to preschoolers. Nevertheless, from a contemporary systems

perspective which emphasizes continuous improvement for educational programs, we also believe that three critical issues became apparent from our descriptive evaluation efforts. Specifically, the following issues emerged:

- (a) How do we assure that all preschoolers who are at risk for school readiness difficulties are recruited and enrolled in high-quality preschool programs?;
- (b) How do we enhance the ability of early childhood personnel to promote school readiness, particularly in areas of child assessment and curriculum implementation?; and
- (c) How do we promote interagency coordination and collaboration of early childhood services for children and their families?.

Based on two years of descriptive evaluation and our understanding of high-quality preschool services to enhance young children's school readiness, we make the following five recommendations:

- (a) clear criteria for what constitutes at risk status for young children and their families should be widely disseminated and accessible to the general public;
- (b) methods in state-funded preschools that promote recruitment and enrollment of all children who are at the greatest risk for school readiness difficulties should be established and carefully monitored;
- (c) as future funds become available or as flexible use of funds is permitted, these monies should be allocated to serve children who are at high risk for school failure, or to enroll children who are at high risk for school failure in full-day programs, or both;
- (d) an interagency task force composed of public and private stakeholders in early childhood services should be established to review implementation issues and make recommendations to address those issues; and
- (e) a statewide, interagency professional development system should be established, which will identify early childhood personnel's professional needs and then implement and evaluate professional development activities to meet those needs, especially in the areas of teaching literacy and numeracy to preschoolers, working with families of young children, implementing Developmentally Appropriate Practices for preschoolers, employing positive

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child guidance strategies with young children, and effectively assessing preschoolers' learning.

We believe that the effective implementation of these five recommendations will enhance services for preschool children in South Carolina.